Making Short-term Global Healthcare Mission Trips Ethical, Equitable and Ecologically Responsible

MARGARET TARPLEY, MLS
JOHN L. TARPLEY, MD, FACS, FWACS
JAMES D. SMITH, MD, FACS

Why is Global Healthcare Education a Hot Topic Today?

Scriptural mandate – Matthew 28:18-20

- *"Therefore, go and make disciples of all nations, baptizing then in the name of the Father and the Son and of the Holy Spirit, and teaching them to obey everything I have commanded you."**

*New International Version

Why is Global Healthcare Education a Hot Topic Today?

Interest by medical students and residents

Rapid, economical air travel

Tropical medicine (paternalism and asymmetric power dynamics)

Global South vs Global North

Editorial – British Medical Journal

Global health educational trips: ethical, equitable, environmental?*

Velin, L., VanDaalen, K., Guinto, R., van Wees, SH., and Saha, S.

http://dx.doi.org/10.1136/bmjgh-2022-008497

Objectives

- The importance of making short-term teams a valuable experience for both the hosts and team members by being ethical, equitable and ecologically responsible.
- How requests should come from the hosts, that team members have expertise to share, and that team members are selected on an equitable basis.
- The importance of training and preparation for the team before departure including being ecologically responsible.

GMHC 2023

ETHICS

9 NOVEMBER 2023

LOUISVILLE, KY

John L. Tarpley, MD, FACS, FWACS
Academic Dean, Pan-African Academy of Christian Surgeons (PAACS)
Professor of Surgery, Emeritus, Vanderbilt

Disclaimers

I have no financial conflicts of interest.

I am a “global enthusiast”.

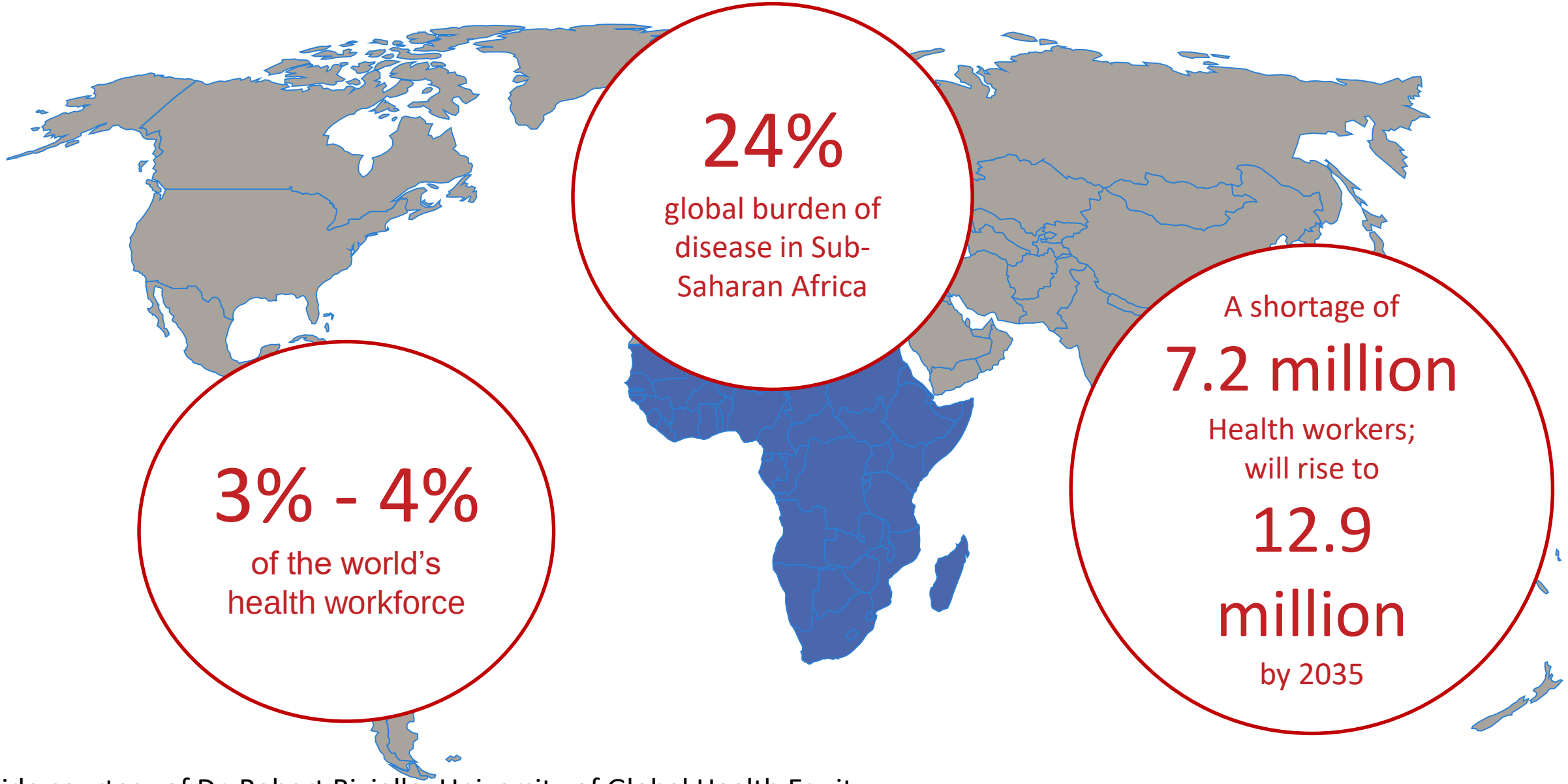
I work for a faith-based NGO: the Pan-African Academy of Christian Surgeons (PAACS)

There are ethics, and then there are ethics.

The Lancet Commission recommended a minimalist number of surgeons (all types), anesthesiologists, and obstetricians/gynecologists of 20 SAO per 100,000. *Lancet* 386: 569–624, 2015

Chris Ellison of The Ohio State and Past-President of the American College of Surgeons recommended 7.5 General Surgeons per 100,000 for the USA. *Surgery* 164:726-732, 2018

The Need for Global Surgical Education and Training



Slide courtesy of Dr. Robert Riviello, University of Global Health Equity

Surgeon to Population Ratio

	Population	Surgeons	Ratio	Surgeon/100 k
Burundi	10,395,931	19	547,154	0.18
Ethiopia	96,633,458	315	306,773	0.33
Total	320,414,474	1604		

ECS Africa: 1 Surgeon per 199,760 =

0.5 Surgeon per 100,000 Population

USA*: **55** Surgeons per 100,000 Population

Sources: COSECSA and World Bank;
*https://data.worldbank.org/indicator/SH.MED.SAOP.P5?locations=US&view=chart

Surgery Snapshot: New York & Malawi

Population: 19 Million
Surgeons: 4,436
Anesthesiologists: 4,431

Population: 19 Million
Surgeons: 65
Anesthesiologists: < 10

PHYSICIANS FOR PEACE

Courtesy of Dr. Leslie Long of Physicians for Peace

Population 7 Million
Area 42 k square miles

Population 53 Million
Area 224 k square miles

State of Tennessee

45 pediatric surgeons

1.5 million children

1/34,000 children

Country of Kenya

25 pediatric surgeons

24 million children

1/1,000,000 children

At a pediatric surgeon density of 1/250,000 child mortality rates start to decrease.

Courtesy of Dr. BL Grayson

chsc CHRISTIAN HEALTH SERVICE CORPS

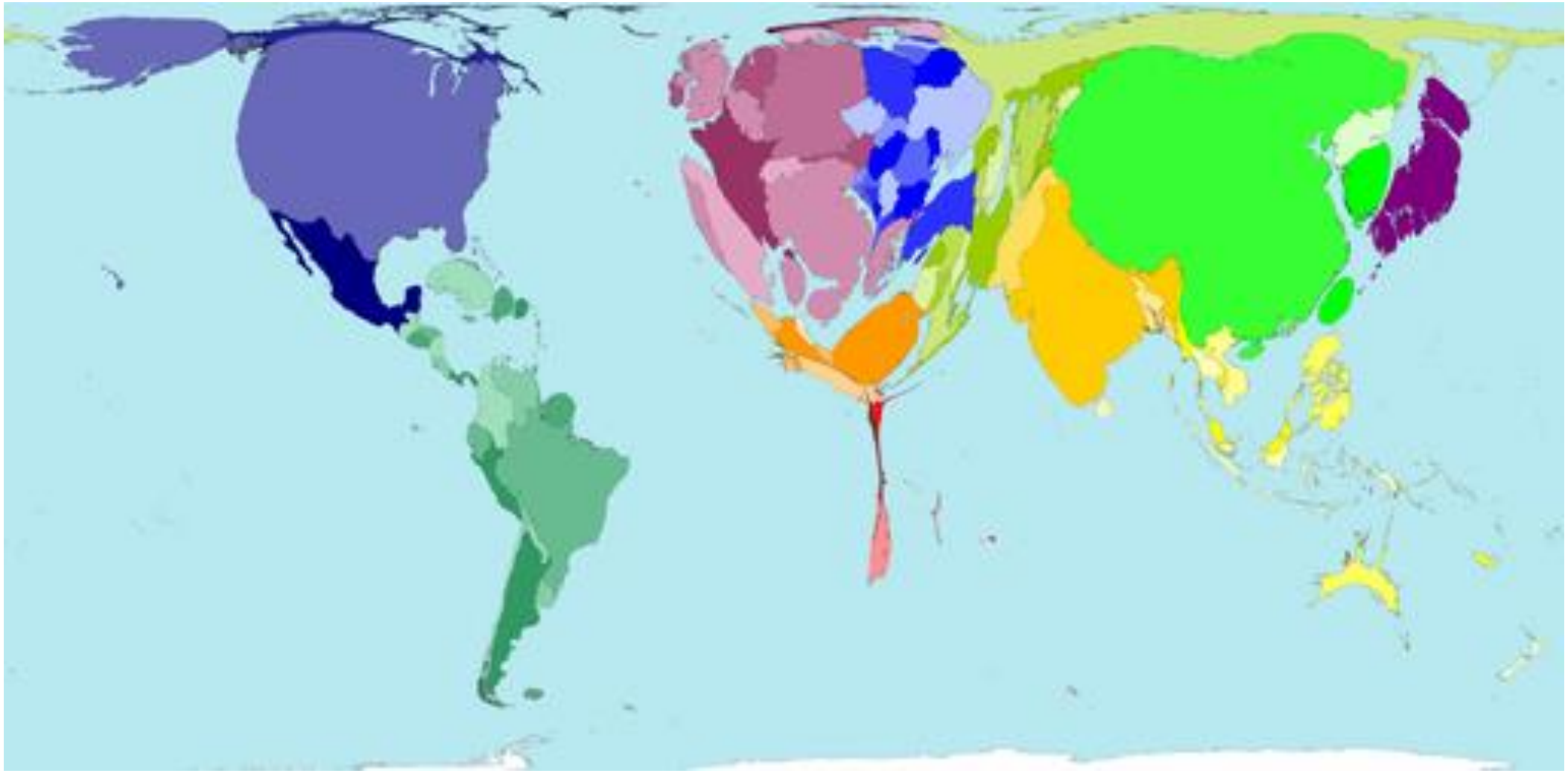
INDIANA UNIVERSITY SCHOOL OF MEDICINE

AIC Kijabe Hospital Health Care to God's Glory

PAN-AFRICAN ACADEMY of CHRISTIAN SURGEONS

BethanyKids

Physicians Working



http://www.worldmapper.org/display.php?selected=219

Ethics

Moral principles that govern a person's behaviour or the conducting of an activity. *Oxford English Dictionary*

A branch of philosophy dating to the Academy of Athens.

Aristotle: virtue ethics. *Nicomachean Ethics* and the *Eudemian Ethics*.

Medical and Biomedical Ethics: WW II, Nazi "experimentation", Nuremburg Trials and Code, the Belmont Report, the Helsinki Declaration, the Geneva Declaration, and the Tuskegee Experiment.

Bulletin
OF THE AMERICAN COLLEGE OF SURGEONS
AMERICAN COLLEGE OF SURGEONS
Inspiring Quality:
Highest Standards, Better Outcomes
100+years

Contents

Materials and methods

Results

Findings

Limitations

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Earn CME

You now have the opportunity to claim CME credit for time spent reading the monthly *Bulletin of the American College of Surgeons*. The deadline to claim CME credit for the March issue is **May 31, 2022**.

M&M conferences provide forum for discussion of ethical issues

by ANJI E. WALL, MD, PHD, MARGARET J. TARPLEY, MLS AND ELIZABETH HEITMAN, PHD
PUBLISHED AUGUST 1, 2018 • PRINT-FRIENDLY

Morbidity and mortality (M&M) conferences provide a forum for surgeons to discuss adverse events, learn from mistakes, and improve systems-based practices. They are a central component of surgical resident education and address the Accreditation Council for Graduate Medical Education's (ACGME) core requirements for resident education: patient care, medical knowledge, systems-based practice, practice-based learning and improvement, professionalism, and interpersonal communication skills.[1-3] Even though case presentations generally focus on technical errors and adverse outcomes, they often address broader issues in patient care. Presenters frequently highlight complexities in the health care system, safety concerns, communication breakdowns, and ethical issues related to the care provided.[4] M&M conferences have become a cornerstone of patient safety and quality improvement initiatives.[1]

One aspect of M&M conferences that has received little attention is the frequency and types of ethical issues that are raised in these meetings. The University of Toronto, ON, has created M&M conferences that make ethical issues the central focus of discussion; however, examination of ethical issues in general M&M conferences is rare.[5] To determine the frequency and types of ethical issues that arise in M&M conferences, the authors conducted an observational study of the ethical issues raised at surgical M&M conferences at Vanderbilt University, Nashville, TN.

The goal of this study was to identify and categorize ethical issues raised in the department's weekly surgical M&M conferences. The primary objective was to determine the frequency and variety of ethical issues raised at M&M conferences

Wall AE, Tarpley MJ, Heitman E. Bull Am Coll Surg. 103: Aug 2018

World J Surg (2020) 44:1349–1360
https://doi.org/10.1007/s00268-019-05351-x

World Journal of Surgery

Check for updates

SURGERY IN LOW AND MIDDLE INCOME COUNTRIES

Ethics as a Non-technical Skill for Surgical Education in Sub-Saharan Africa

Margaret J. Tarpley[1,2] · Ainhoa Costas-Chavarri[3] · Beryl Akinyi[4] · John L. Tarpley[1,2]

World J Surg 44:1349-1360, 2020

Published online: 2 January 2020
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Abstract

Background In recent years, surgical education has increased its focus on the non-technical skills such as communication and interpersonal relationships while continuing to strive for technical excellence of procedures and patient care. An awareness of the ethical aspects of surgical practice that involve non-technical skills and judgment is of vital concern to surgical educators and encompasses disparate issues ranging from adequate supervision of trainees to surgical care access.

Methods This bibliographical research effort seeks to report on ethical challenges from a sub-Saharan Africa (SSA) perspective as found in the peer-reviewed literature employing African Journals Online, Bioline, and other sources with African information as well as PubMed and PubMed Central. The principles of autonomy, non-maleficence, beneficence, and justice offer a framework for a study of issues including: access to care (socioeconomic issues and distance from health facilities); resource utilization and decision making based on availability and cost of resources, including ICU and terminal extubation; informed consent (both communication about reasonable expectations post-procedure and research participation); research ethics, including local projects and international collaboration; quality and safety including supervision of less experienced professionals; and those religious and cultural issues that may affect any ethical decision making. The religious and cultural environment receives attention because beliefs and traditions affect medical choices ranging from acceptance of procedures, amputations, to end-of-life decisions.

Results and Conclusions Ethics awareness and ethics education should be a vital component of non-technical skills training in surgical education and medical practice in SSA for trainees. Continuing professional development of faculty should include an awareness of ethical issues.

Ethics as a non-technical skill for surgical education in sub-Saharan Africa

Autonomy—religion and culture

Autonomy—informed consent

Beneficence—quality and safety including supervision

Justice and non-maleficence—ethics of international collaboration and ‘‘global surgery’’

Justice—access to care, both socioeconomic and location

Justice and autonomy—resource utilization including end-of-life decision making

Justice—research ethics, shared authorship, collaboration, informed consent, and use of African literature databases

World J Surg 44:1349–1360, 2020

World J Surg
https://doi.org/10.1007/s00268-019-05261-y

LETTER TO THE EDITOR

Letter to the Editor: Honorary Authorships in Surgical Literature

Margaret Tarpley[1,2]

World J Surg 44:644-645, 2020.

© Société Internationale de Chirurgie 2019

In response to the article by JD Luiten and co-authors (WJS, March 2019) [1] reporting their findings on continuing usage of honorary authorship, this letter seeks to highlight the complexity of conducting research in low- and middle-income countries (LMICs) and to encourage inclusiveness and meaningful recognition of colleagues/co-workers that might appear technically as honorary but reflect essential contributions.

The "ANDs" connecting the criteria create particular difficulties. Also note what is ruled out as deserving authorship—data collecting; providing subjects; giving permission for the research to go forward; acquisition of funding; general supervision of a research group or general administrative support; and writing assistance, technical editing, language editing, proofreading [3].

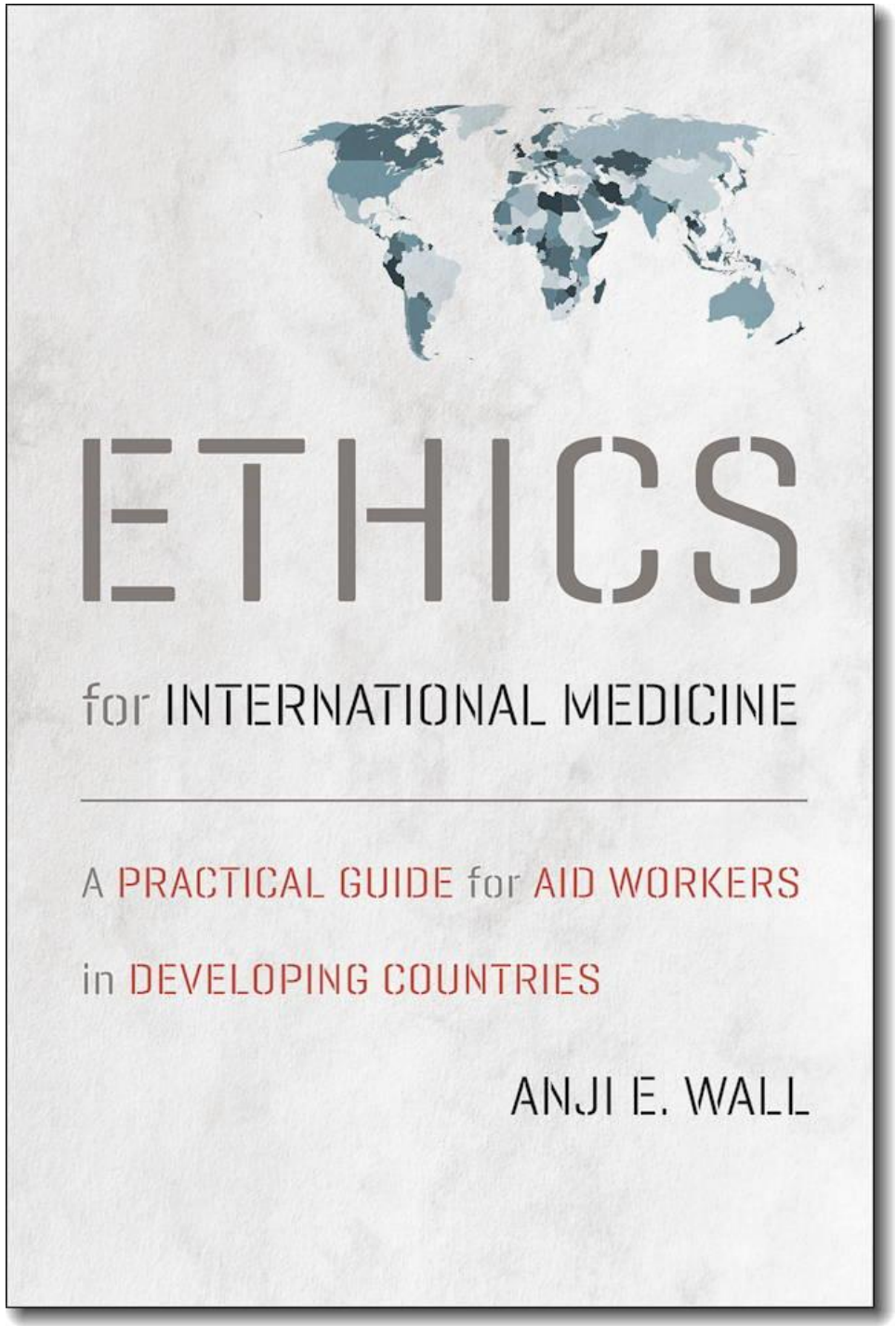
LMIC institutions require faculty to publish in peer-re-

HEC Forum (2011) 23:79–90
DOI 10.1007/s10730-011-9155-8

The Context of Ethical Problems in Medical Volunteer Work

Anji Wall

Published online: 21 May 2011
© Springer Science+Business Media B.V. 2011



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Transplant Surgeon

Baylor University Medical Center

Dallas, TX

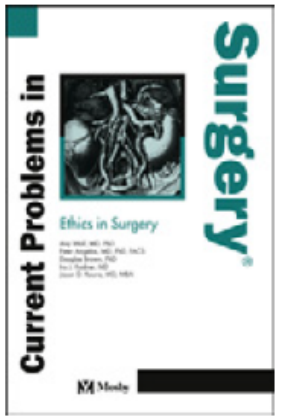
Dartmouth College Press, Hanover, NH, 2012

Current Problems in Surgery 50 (2013) 99–134

Contents lists available at SciVerse ScienceDirect

Current Problems in Surgery

journal homepage: www.elsevier.com/locate/cpsurg



Ethics in Surgery

Anji Wall, MD, PhD, Peter Angelos, MD, PhD, FACS, Douglas Brown, PhD, Ira J. Kodner, MD, and Jason D. Keune, MD, MBA

Current Problems in Surgery 50: 99–134, 2013

World J Surg (2014) 38:1574–1580
DOI 10.1007/s00268-014-2600-5

World Journal of Surgery

Ethics in Global Surgery

Anji E. Wall

World J Surg 38:1574-1580, 2014

Published online: 1 May 2014
© Société Internationale de Chirurgie 2014

Abstract Global surgery, while historically a small niche, is becoming a larger part of the global health enterprise. This article discusses the burden of global surgery, emphasizing the importance of addressing surgical needs in low- and middle-income countries. It describes the barriers to surgical care in the developing world, the ethical challenges that these barriers create, and strategies to overcome these barriers. It emphasizes the crucial role of preparation for global surgical interventions as a way to maximize benefits as well as minimize harms and ethical challenges. It ends with the cautionary statement that especially prevalent in LMICs. Furthermore, it argues that basic surgical interventions should not be seen as specialized tertiary care but rather as primary care. Given that global surgery should take on a larger role in global health, it goes on to describe the barriers to surgical care in LMICs and the ethical challenges that these barriers create. It suggests ways in which to improve global surgical interventions so as to address the ethical problems that arise in this setting.

World J Surg (2019) 43:1466–1473
https://doi.org/10.1007/s00268-019-04975-3

World Journal of Surgery

Check for updates

SURGICAL SYMPOSIUM CONTRIBUTION

Ethics in Global Pediatric Surgery: Existing Dilemmas and Emerging Challenges

Aaron J. Cunningham[1] · Caroline Q. Stephens[1] · Emmanuel A. Ameh[2] · Philip Mshelbwala[3] · Benedict Nwomeh[4] · Sanjay Krishnaswami[5]

World J Surg 43:1466-1473, 2019

Published online: 8 March 2019
© Société Internationale de Chirurgie 2019

Abstract The rapid growth of global pediatric surgery beyond direct care delivery into research, education, and advocacy necessitates re-evaluation of the traditional ethical paradigms which have governed our partnerships in low- and middle-income countries (LMIC). Within this paper, we consider current and emerging ethical challenges and discuss principles to consider in order to promote autonomous systems for pediatric surgical care in LMIC.

Introduction

The recent evolution of Global Surgery from isolated clinical humanitarian trips toward a comprehensive approach to building surgical capacity in low- and middle-income countries (LMIC) [1] has shifted the ethical land-

reflect on how ethics have been impacted, and whether the overall ethical framework should be re-evaluated in order to match the expanding role of non-clinical work [3] (Fig. 1b). Such deliberation is especially important in global pediatric surgery, given the vulnerable population and the inherent connection to established initiatives in

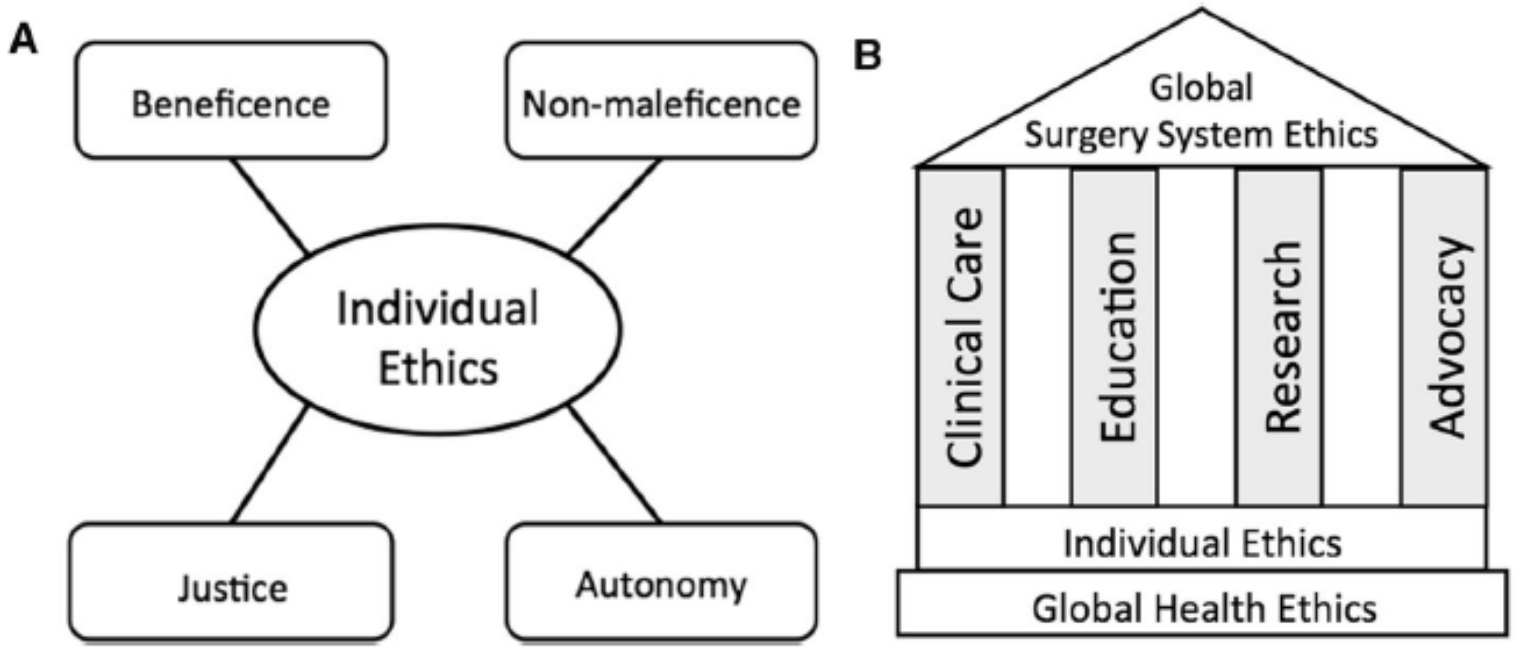


Fig. 1 Evolution of Ethical Considerations in Global Surgery. **a** Traditional ethical paradigms in surgical missions (autonomy, beneficence, non-maleficence, and justice) focused around ensuring ethical care for individual patients. **b** Evolving global surgery ethical paradigms consider the broader global health context with focus on ethical considerations in systems-level education, research and advocacy in addition to clinical care

Ethics in Global Pediatric Surgery:
Existing Dilemmas and Emerging Challenges
World J Surg 43:1466-1473, 2019

OPEN ACCESS Freely available online

PLOS | MEDICINE

Essay

Building Research Capacity in Africa: Equity and Global Health Collaborations

Kathryn M. Chu[1]*, Sudha Jayaraman[2], Patrick Kyamanywa[3], Georges Ntakiyiruta[3]

1 Center for Surgery and Public Health, Brigham and Women's Hospital, Harvard Medical School, Department of Surgery, Boston, Massachusetts, United States of America, **2** Virginia Commonwealth University Medical Center, Department of Surgery, Richmond, Virginia, United States of America, **3** University of Rwanda, School of Medicine, Department of Surgery, Butare, Rwanda

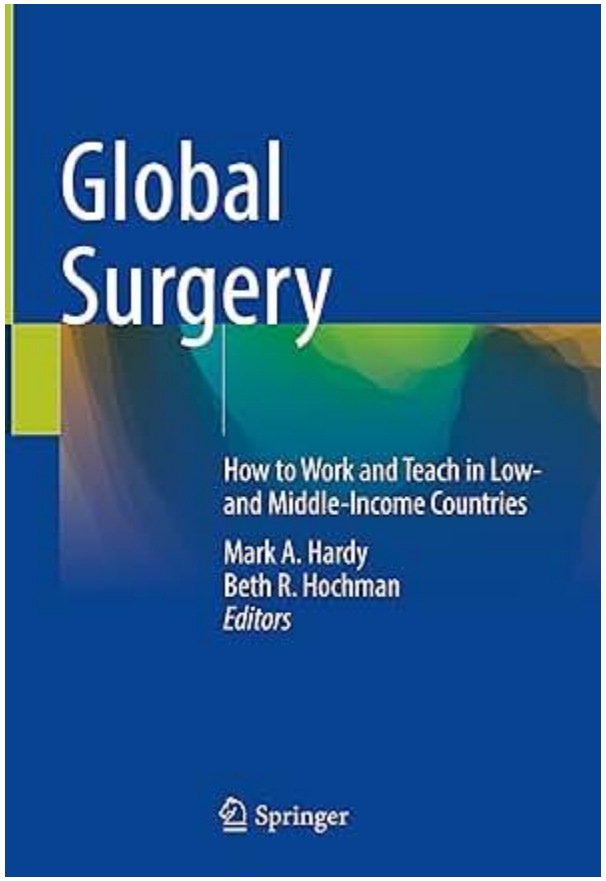
Introduction

Global health is a growing academic field where high-income country (HIC) faculty and students work in low- and middle-income countries (LMICs), especially in Africa; learn about new cultures, settings, and diseases; and possibly develop an expertise to address existing and emerging challenges in health care [1]. Global health has brought beneficial HIC medical knowledge particularly to African

Summary Points

- Global health has increased the number of high-income country (HIC) investigators conducting research in low- and middle-income countries (LMICs).
- Partnerships with local collaborators rather than extractive research are needed.
- LMICs have to take an active role in leading or directing these research collaborations in order to maximize the benefits and minimize the harm of inherently inequitable relationships.
- This essay explores lessons from effective and equitable relationships that exist between African countries and HICs.

PLoS Med 11(3):e1001612, 2014



Global Surgery

How to Work and Teach in Low- and Middle-Income Countries

Editors: Mark A. Hardy and Beth R. Hochman. Springer. 2023

HOW TO MAINTAIN ETHICAL STANDARDS OF GLOBAL SURGERY PRACTICE AND PARTNERSHIPS

BARNABAS T. ALAYANDE, ROBERT R. RIVIELLO, ABEBE BEKELE, PAGES 21-37

How to Maintain Ethical Standards of Global Surgery Practice and Partnerships

3

Barnabas T. Alayande, Robert R. Riviello, and Abebe Bekele

The single story creates stereotypes, and the problem with stereotypes is not that they are untrue, but that they are incomplete. They make one story become the only story.

– Chimamanda Adichie

Abbreviations

HIC	High-Income Country
IRB	Institutional Review Board
LMIC	Low- and Middle-Income Country

lack access to affordable, available, adequate surgical care when needed. It is agreed that this burden tilts significantly towards low- and middle-income countries (LMICs), where over 148 million additional surgeries are needed

Hardy, M.A., Hochman, B.R. (eds) Global Surgery. Springer, Cham. 2023 https://doi.org/10.1007/978-3-031-28127-3_3

How to Maintain Ethical Standards of Global Surgery Practice and Partnerships

Four domains of ethics in global surgery:

- Clinical Care
- Research
- Education
- Collaborations

Alayande BT, Riviello R, Bekele A, Chapter 3,
in *Global Surgery*, Eds: Hardy & Hochman, Springer, 2-23

Selected Quotes i

Decolonizing is an essential part of the journey to equity…

(Eschew) being poor guests

Planning based on local needs and priorities

Mutual benefit

Clarity in terms of engagement, roles, and goals

(The guest) must not create dependence

Avoid diverting local human and material resources from patient care

to the guest's initiatives, projects

Think carbon footprint. "Reduce, Reuse, Recycle"

Develop a firsthand cultural, religious, and social awareness

Encourage purchases using the local supply chain

Do not perceive yourself as "the expert" over a resident local professional

Informed consent must be true informed consent.

Selected Quotes ii

Quality of Care

Be Inclusive

Follow-up. Outcomes including complications must be evaluated and documented.

(Be a professional first assistant)

Documentation

End of Life, etc.

Organ Donation and Transplantation

Ethical Quality Improvement

Trans-Border Global Surgery Education

- Refuse assumptions that coming from a HIC makes one a global expert.
- Promote reciprocity.

Selected Quotes iii

1000 articles are produced annually by global partnerships.

Be sure to appropriately involve and adequately credit LMIC surgical researchers. Research should primarily benefit them.

Grow local partners' capacity for research. (C Mock, T P Kingham)

The expertise of LMIC global surgery contributors is key to global surgery research, and they need to be genuinely included – "not stuck in the middle". (Hedt-Gauthier et al.)

Authorship order: early on, clearly discussed in a transparent manner.

IRB and/or Ethics Committee hurdles. Be prepared for delays.

Data Management (who, where) and Publishing (where)

Photography, Social Media

Familiarize Yourself with the Monette Principles

Mutual benefits
Collective agenda setting
Equity in partnerships
Accountability
Incorporation of capacity building

Monette EM, McHugh D, Smith MJ, Canas E, Jabo N, Henley P, Nouvet E.
Informing 'good' global health research partnerships: a scoping review of guiding principles.
Glob Health Action. 2021;14(1):1892308. https://doi.org/10.1080/16549716.2021.1892308.

Monette Principles i

Reciprocity

Benefit

Mutual benefits

Shared benefits

Collective writing and publishing

Sharing of data and networks

Pooling of profits and merits

Focus

Setting baseline goals, objectives

Setting future milestones

Collective agenda setting

Equity responsibilities

Responsiveness to causes of inequities

Proportionality

Accountability to partnership

Accountability to beneficiaries

Enhance capacities

Sustainability

Commitment to the future

Development of national research capacity

Interacting with stakeholders

Broad consultative process

Understanding contextual values

Sharing, assigning, and clarifying

Monette Principles ii

Critically engaging context
Ensuring research influences policy
Application of research results
Effective communication
Humility
Promotion of mutual learning
Disclosure of financial interests
Prevention of adverse impact
Respect

Commitment to transparency
Authentic partnerships
Adapt and respond
Leadership
Inclusivity and inclusion
Social justice
National ownership
Promotion of common good
Stewardship

Relinquishing of power by the Northern partner and
acceptance of autonomy of the Southern partner

Conclusions

Capacity building should be at the core of collaborations.

Heads up: Ethical Quagmires Ahead!

The Physician's Prayer – Sir Robert Hutchison

From inability to let well alone,

From too much zeal for the new and contempt for what is old,

From putting knowledge before wisdom, science before art and cleverness before common sense,

From treating patients as cases and

From making the cure of disease more grievous than the endurance of the same,

Good Lord deliver us.

BMJ 317(7174):1687A, 1998

Omnibus per artem fidemque prodesse.

"To serve all with skill and fidelity."

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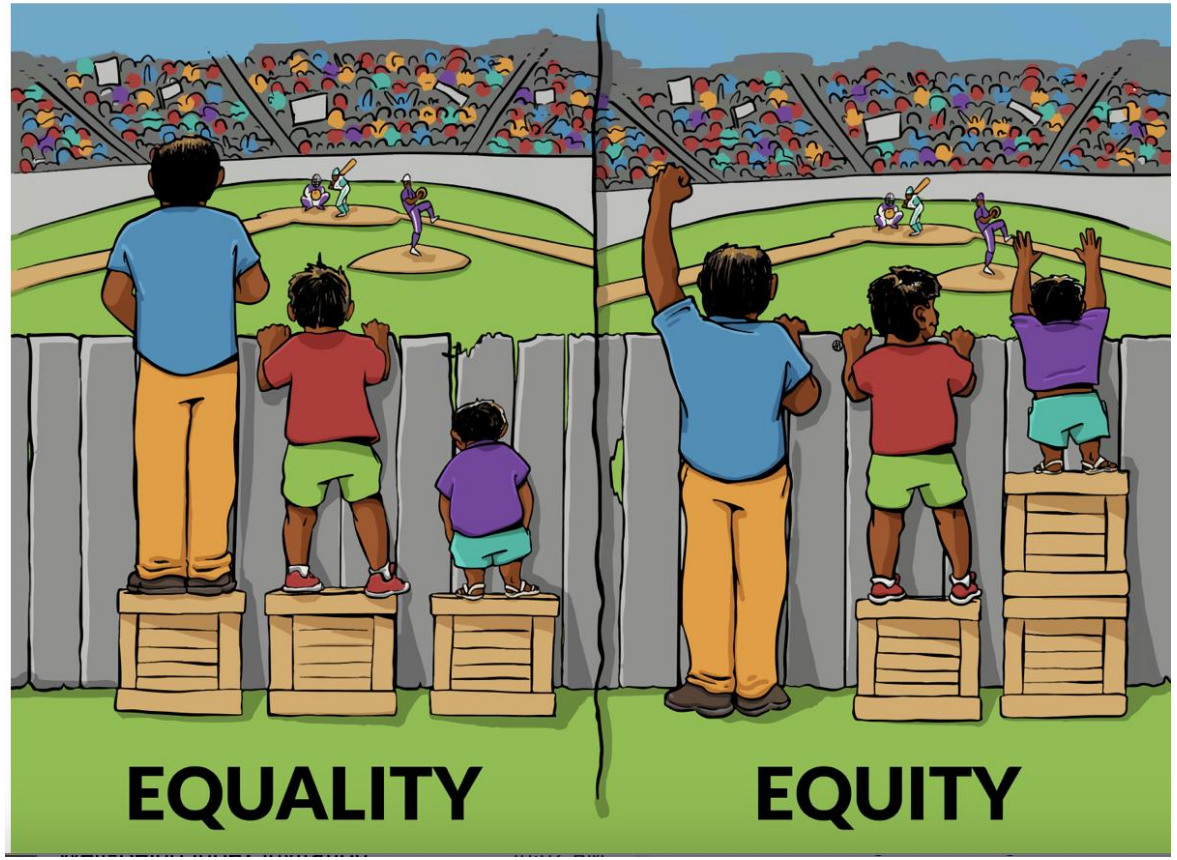
Equity = Leveling the Playing Field

Margaret Tarpley

Illustrating Equality VS Equity

January 13, 2016
by IISC



https://interactioninstitute.org/illustrating-equality-vs-equity/

Equity Starts at Home and in the Planning for an International Mission Project

Is the project one **requested by the host** or does the mission team organizer initiate the idea and search for a host?

Is **cultural humility and sensitivity training** provided before the trip?

Is the **mission scheduling done that is best for the host** and not the visitor?

Do **financial considerations** prevent some persons from taking part?

- How is a trip funded? By individuals? By a church missions fund? By requests for support?

Are there **physical barriers** that discourage or prevent skilled persons with disabilities from taking part such as the need to walk long distances or rough terrain? Can accommodations be made that reduce the barriers?

Equity Continues during the Education Short-term Experiences

Are visiting team members **qualified to do the work** and have appropriate licensing, if required?

Are the **local health care professionals' equal members** of the team?

Are some of the team members coming to perform tasks that locals could **do** alone or even be paid for such as painting a building or doing other semi- or unskilled labor?

Does the visit provide **training and capacity-building opportunities** to local healthcare professionals and community members?

Is this trip part of a **long-term commitment** to this community?

If **recreational excursions** are planned during the mission, are the hosts invited to participate?

Equity is focusing on local needs

The playing field is also in your neighborhood, community, state, and nation

Local or regional is likely **more affordable** to your volunteers and your church or other institution

Local gives opportunities to those who can't be away for 1 or more weeks due to

- Family responsibilities
- Work requirements
- Physical limitations
- Financial considerations

Ecologically Responsible?

Interesting Statistics

The healthcare sector contributes 3-10% of greenhouse gas emissions in any country and in the US consumes 8% of the total energy used

Operating rooms generate 20-30% of a hospitals waste, 2/3 of the regulated waste and consumes 3-6 times more energy than the rest of the hospital

In one year, the healthcare conference industry produces carbon emissions equivalent to those produced in the US

A return flight for one person from the US to Rwanda creates 3.1 tons of CO_2 equivalents vs 0.1 tons for one person in Sub-Saharan Africa in one year

What Does Ecologically Responsible Mean to You?

Local environmental problems?

Climate Change?

Do we have a scriptural mandate to take care of our world? Gensis 1:27-31

Travel using fossil fuels?

Clean water?

Single use medical equipment and supplies?

Service and repair of sophisticated equipment?

Hosts

Recognize the time commitment your hosts are making for you

Be a low maintenance guest/visitor

Be respective of the hosts suggestions/requirements

Ask what you can do to be sensitive to local environmental problems or needs

Supplies

Disposable versus reusable equipment

Antibiotics

Sutures

Surgical supplies

Anesthesia gases

Water use

Plastics

Things We Can Do to be More Ecological in a Sustainable Way

Reduce waste

Conserve energy

Minimize our carbon footprint

Support local communities

Educate ourselves before taking a trip

Measure the environmental impact

Conclusions

Prepare yourself with environmental factors in mind

Be self-aware as to how you can minimize your environmental impact

Remember that we have a responsibility as Christians to take care of God’s creation

Questions?